I. Amendments to the Claims

This listing of claims replaces without prejudice all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently Amended) An image processing system for processing video content in a sequence of video frames and linking one or more pixel objects embedded in said video content to selected data objects in a sequence of video frames, the image processing system comprising:

a video capture system for capturing a frame of said sequence of video frames to be viewed defining a captured video frame;

a user interface for enabling a user to select one or more pixel objects in said captured frame defining selected pixel objects;

~~a pixel object tracking system which includes a processor which automatically tracks said selected pixel objects in other frames, said pixel object tracking system including a system for automatically determining changes in the characteristics of said one or more pixel objects based upon~~

~~changes in lighting and automatically compensating based upon those changes~~

a video linking system which generates one or more linked video files, separate from and not embedded in said video content, said linked video files identifying pixel objects by frame number and location within the frame and provide one or more links to predetermined data objects for each pixel object,

wherein said linked video files are configured so that selected locations in said video frames selected by a pointing device during playback of the video can be linked with the data objects when said selected locations correspond to said pixel objects; and

wherein said video linking system samples said video content at a sample rate which is a multiple of plural standard playback rates.

2. (Currently Amended) The system as recited in claim 1, wherein said ~~data content has a predetermined playback rate and said~~ video linking system samples said video content at a sample rate of a multiple of 30 frames per second and 12 frames per second ~~less than said predetermined playback rate~~.

3. (Currently Amended) The system as recited in claim 2, wherein said sample rate is at least 3 ~~three (3)~~ frames per second.

4. (Original) The system as recited in claim 1, wherein said video linking system is configured to identify segment breaks in said video content.

5. (Original). The system as recited in claim 4, wherein said segment breaks are determined by determining the median average pixel values for a series of frames and comparing changes in the pixel values relative to the median average and indicating a segment break when the change in pixel values represents at least a predetermined change relative to the median average.

Claims 6-10. (Cancelled)

11. (Currently Amended) The image processing system as recited in claim 1, further including a video playback application for playing back video content and said linked video files, wherein said video playback application is configured to (i) determine if ~~selected~~ locations selected by a pointing device during playback of the video content correspond to said

predetermined pixel objects and (ii) provide a link to a data object when said selected location corresponds to one of said predetermined pixel objects.

Claim 12. (Cancelled)

13. (New) The system as recited in claim 1, wherein said video linking system samples said video content at a sample rate of a multiple of NTSC and PAL frame rates.

14. (New) The system as recited in claim 1, wherein said video linking system samples said video content at a sample rate of a multiple of NTSC and 12 FPS frame rates.

15. (New) The system as recited in claim 1, wherein said video linking system samples said video content at a sample rate of a multiple of NTSC, PAL, 15 FPS, and 12 FPS frame rates.

16. (New) The system as recited in claim 1, wherein said video linking system samples said video content at a sample rate of a multiple of NTSC and movie frame rates.

17. (New) The system as recited in claim 1, wherein said video linking system clusters the sampled video content with plural frames per cluster.

18. (New) The system as recited in claim 1, further comprising a pixel object tracking system which includes a processor which automatically tracks said selected pixel objects in other frames, said pixel object tracking system including a system for automatically determining changes in the characteristics of said one or more pixel objects based upon changes in lighting and automatically compensating based upon those changes.

19. (New) An image processing system for processing video content in a sequence of video frames and linking one or more pixel objects embedded in said video content to selected data objects in a sequence of video frames, the image processing system comprising:

a video capture system for capturing a sequence of video frames;

a user interface for enabling a user to select a pixel object in at least one of the captured frames;

a video linking system which generates a linked video file, separate from and not embedded in said video content, said

linked video file comprising (i) a pixel object file which identifies, by frame number and location within the frame, the selected pixel object in the at least one captured frame, and (ii) a data object file which links the selected pixel object to a predetermined data object, said video linking system sampling said video content at a sample rate which is a multiple of plural standard playback rates.

20. (New) The system as recited in claim 19, wherein said video linking system samples said video content at a sample rate of a multiple of 30 frames per second and 12 frames per second.

21. (New) The system as recited in claim 19, wherein said sample rate is at least 3 frames per second.

22. (New) The image processing system as recited in claim 19, further including a video playback application for playing back video content and said linked video files, wherein said video playback application is configured to (i) determine if locations selected by a pointing device during playback of the video content correspond to said predetermined pixel objects and (ii) provide a link to a data object when said

selected location corresponds to one of said predetermined pixel objects.

23. (New) The system as recited in claim 19, wherein said video linking system samples said video content at a sample rate of a multiple of NTSC and PAL frame rates.

24. (New) The system as recited in claim 19, wherein said video linking system samples said video content at a sample rate of a multiple of NTSC and 12 FPS frame rates.

25. (New) The system as recited in claim 19, wherein said video linking system samples said video content at a sample rate of a multiple of NTSC, PAL, 15 FPS, and 12 FPS frame rates.

26. (New) The system as recited in claim 19, wherein said video linking system samples said video content at a sample rate of a multiple of NTSC and movie frame rates.

27. (New) The system as recited in claim 19, wherein said video linking system clusters the sampled video content with plural frames per cluster.

28. (New) The system as recited in claim 19, further comprising a pixel object tracking system which includes a processor which automatically tracks said selected pixel objects in other frames, said pixel object tracking system including a system for automatically determining changes in the characteristics of said one or more pixel objects based upon changes in lighting and automatically compensating based upon those changes.

29. (New) An image processing system for processing video content in a sequence of video frames and linking one or more pixel objects embedded in said video content to selected data objects in a sequence of video frames, the image processing system comprising:

a video capture system for capturing a sequence of video frames;

a user interface for enabling a user to select a pixel object in at least one of the captured frames;

a video linking system which generates a linked video file, separate from and not embedded in said video content, said linked video file comprising (i) a pixel object file which identifies, by frame number and location within the frame, the selected pixel object in the at least one captured frame, and (ii) a data object file which links the selected pixel object to

a predetermined data object, said video linking system sampling said video content at a sample rate which is a multiple of plural standard playback rates, said video linking system clustering the sampled video content with plural frames per cluster.